

Summer Math Review of Grade 6H for Students Entering Grade 7H in August 2018

The Math skills listed below have been covered this school year (2017-2018) in grade and should be practiced over the summer for mastery by **every** student. **All students will be tested on these skills on Tuesday, August 21, 2018.**

Skills needing practice:

1. Add, subtract, multiply, and divide integers
2. Simplify algebraic expressions
3. Solve one and two step equations
4. Evaluate using the distributive property
5. Add, subtract, multiply, and divide fractions
6. Add, subtract, multiply, and divide decimals
7. Find the volume of three dimensional figures
8. Find the surface area of three dimensional figures
9. Using percents
10. Solve expressions using order of operations

Resources for practice:

- IXL website: www.ixl.com/signin/oll
- Prodigy Math Games website: www.prodigygame.com
- Math based computer games
- Math websites such as multiplication.com
- Math review workbooks (available at school supply stores such as Educator in Metairie),
- Online school supply websites: www.schoolspecialty.com and www.amazon.com
- Math workbook from this school year
- Google
- Kahoot website: <https://create.kahoot.it/>

A sample problem along with the answer for each skill is listed below. Students should practice as many problems as need for mastery of each skill. Please email kmaples@ollourdes.org for IXL login questions.

Examples:

$$1. \begin{array}{r} -7 + 3 \\ -4 \end{array} \quad \begin{array}{r} 5 - 10 \\ -5 \end{array} \quad \begin{array}{r} -9(-3) \\ 27 \end{array} \quad \begin{array}{r} 14 \div (-7) \\ -2 \end{array}$$

$$\begin{array}{r} 7 - (-10) \\ 7 + 10 \\ 17 \end{array}$$

$$2. \begin{array}{r} m + 3m + 8 \\ 4m + 8 \end{array}$$

$$\begin{array}{r} 12a + 3 + 18 - 9a \\ 3a + 21 \end{array}$$

$$3. \begin{array}{r} a - 12 = -4 \\ +12 \quad +12 \\ a = 8 \end{array}$$

$$\begin{array}{r} h + 3 = -5 \\ -3 \quad -3 \\ h = -8 \end{array}$$

$$\begin{array}{r} -6a = 18 \\ \frac{-6a}{-6} = \frac{18}{-6} \\ a = -3 \end{array}$$

$$\begin{array}{r} \frac{c}{-3} = 9 \cdot (-3) \\ c = -27 \end{array}$$

$$\begin{array}{r} 2a - 4 = -18 \\ +4 \quad +4 \end{array}$$

$$\begin{array}{r} \frac{2a}{2} = \frac{-14}{2} \\ a = -7 \end{array}$$

$$\begin{array}{r} \frac{h}{5} + 1 = -7 \\ -1 \quad -1 \end{array}$$

$$\begin{array}{r} 5 \cdot \frac{h}{5} = -8 \cdot 5 \\ h = -40 \end{array}$$

$$4. \quad 3(x-7)$$

$$3x - 21$$

$$-4(12-f)$$

$$-48 + 4f$$

$$5(1-b)$$

$$5 - 5b$$

$$5. \quad \frac{4}{7} + \frac{1}{3}$$

$$\frac{12}{21} + \frac{7}{21}$$

$$\frac{19}{21}$$

$$-\frac{3}{8} + \frac{1}{6}$$

$$-\frac{9}{24} + \frac{4}{24}$$

$$-\frac{5}{24}$$

$$-\frac{1}{4} \cdot \frac{4}{9}$$

$$-\frac{1}{9}$$

$$\frac{7}{10} \div \left(-\frac{4}{5}\right)$$

$$\frac{7}{10} \cdot \left(-\frac{5}{4}\right)$$

$$-\frac{7}{8}$$

$$\frac{1}{6} + d = \frac{3}{4} - \frac{1}{6}$$

$$-\frac{1}{6} \quad -\frac{1}{12} - \frac{2}{12}$$

$$d = \frac{7}{12}$$

$$6. \quad h + 2.7 = 3.5$$

$$-2.7 \quad -2.7$$

$$h = .8$$

$$r - 3.9 = -8.5$$

$$+ 3.9 \quad + 3.9$$

$$r = -4.6$$

$$\frac{3.5x = 14}{3.5 \quad 3.5}$$

$$x = 4$$

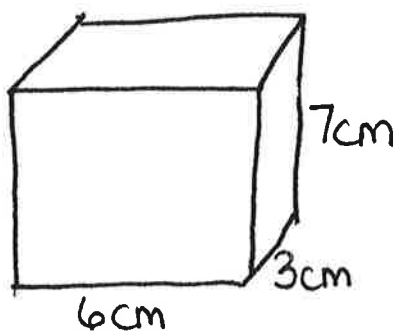
$$\begin{array}{r} 4. \\ 3.5 \overline{) 14.0} \\ \underline{14.0} \\ 0 \end{array}$$

$$05. \quad \frac{x}{0.5} = 18(0.5)$$

$$x = 9$$

$$\begin{array}{r} +18 \\ 0.5 \\ \hline 9.0 \end{array}$$

7. Volume = $l \cdot w \cdot h$ (unit of measurement is to the third power... in^3)

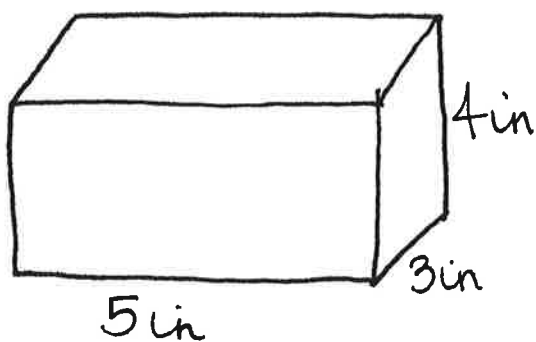


$$V = 6 \cdot 3 \cdot 7$$

$$V = 6 \cdot 21$$

$$V = 126 \text{cm}^3$$

8. Surface Area = $2(lw + wh + lh)$ → unit of measurement is to the 2nd power (in^2)



$$SA = 2(5 \cdot 3 + 3 \cdot 4 + 4 \cdot 5)$$

$$SA = 2(15 + 12 + 20)$$

$$SA = 2(47)$$

$$SA = 94 \text{in}^2$$

9. What is 40% of 70?

28

$$\begin{array}{r} 70 \\ \times .40 \\ \hline 28.00 \end{array}$$

You and 2 friends go to lunch. The bill is \$50 and you leave a 20% tip. How much does each person pay for lunch?

$$\begin{array}{r} 50 \\ \times .20 \\ \hline 10.00 \end{array}$$

\$50 bill
+\$10 tip
\$60.00

$$3 \overline{) 60.00}$$

\$20.00/person

A shirt normally priced at \$30 is on sale for 20% off. What is the discount and the sales price of the shirt?

$$\begin{array}{r} 30 \\ \times .20 \\ \hline 6.00 \end{array}$$

discount \$6.00

$$\begin{array}{r} 30.00 \\ - 6.00 \\ \hline 24.00 \end{array}$$

Sales price
\$24.00

10. $14 \div 7 \cdot 5 - 3^2$

$$14 \div 7 \cdot 5 - 9$$

$$\checkmark 2 \cdot 5 - 9$$

$$\checkmark 10 - 9$$

$$\textcircled{1}$$

$$4[30 - (10 - 2) \cdot 3]$$

$$4[30 - 8 \cdot 3]$$

$$4[30 - 24]$$

$$4[6]$$

$$\textcircled{24}$$

$$\frac{3(8) + 6^2}{3}$$

$$\frac{24 + 36}{3}$$

$$\frac{60}{3}$$

$$\textcircled{20}$$

$$\frac{(2.5)^2 + 4}{3^2 - 5}$$

$$\frac{(10)^2 + 4}{9 - 5}$$

$$\frac{100 + 4}{4}$$

$$\frac{104}{4}$$

$$\textcircled{26}$$